



Water-Data Report 2008

**01462800 JACOBS CREEK AT SOMERSET, NJ**

DELAWARE RIVER BASIN

LOCATION.--Lat 40°16'42", long 74°51'13" referenced to North American Datum of 1983, Ewing Township, Mercer County, NJ, Hydrologic Unit 02040105, on River Road (State Route 29), 300 ft north of Jacobs Creek Road, 400 ft upstream from confluence with Delaware River, and 0.3 miles northwest from Somerset.

DRAINAGE AREA.--13.3 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1987-88, 2000, 2006-08.

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 11.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 5

[Remark codes: <, less than; E, estimated.]

Date	Time	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L of sat- uration (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, mg/L fltrd, (00915)
<b>Nov</b> 13...	1000	.8	.060	.046	760	12.1	103	8.4	465	10.9	8.2	130	32.2
<b>Feb</b> 26...	0930	2.9	.077	.058	754	13.4	100	8.4	500	6.8	3.2	92	21.8
<b>May</b> 07...	1000	1.0	.064	.049	760	11.2	109	8.3	304	18.1	13.9	95	22.1
<b>Aug</b> 11...	1000	2.4	.081	.060	758	8.3	87	8.2	411	19.4	17.7	110	25.8

## 01462800 JACOBS CREEK AT SOMERSET, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total non-filterable, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
Nov 13...	13.1	2.52	33.4	84	72.7	E.09	5.6	25.9	E238	257	<1	E.13	E.006
Feb 26...	9.14	1.99	51.0	40	104	<.12	10.6	19.6	E248	252	3	.24	E.009
May 07...	9.61	1.92	20.6	68	35.3	<.12	3.9	20.9	E156	165	<1	.23	.013
Aug 11...	10.6	2.71	33.2	78	63.4	E.12	5.8	18.9	E210	226	3	.23	<.010

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	Nitrate + nitrite water fltrd, mg/L as N (00631)	Particulate nitrogen, susp, water, mg/L (49570)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd, mg/L (00600)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L as P (00666)	Phosphorus, water, unfltrd, mg/L as P (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Arsenic water, fltrd, µg/L (01000)	Arsenic water, unfltrd, µg/L (01002)
Nov 13...	.32	E.03	E.45	E.48	.022	.024	.028	.2	<.04	.2	2.0	--	--
Feb 26...	1.45	E.02	1.7	E1.7	.018	.027	.033	.2	<.04	.2	2.5	.44	E.38
May 07...	.25	E.02	.48	E.51	E.008	.016	.021	.2	<.04	.2	2.1	--	--
Aug 11...	.53	E.03	.76	E.80	.044	.052	.056	.2	<.04	.2	3.0	.68	.78

01462800 JACOBS CREEK AT SOMERSET, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 5

[Remark codes: <, less than; E, estimated.]

Date	Barium, water, unfltrd recover- able, µg/L (01007)	Beryll- ium, water, unfltrd recover- able, µg/L (01012)	Boron, water, fltrd, µg/L (01020)	Boron, water, unfltrd recover- able, µg/L (01022)	Cadmium water, unfltrd µg/L (01027)	Chrom- ium, water, unfltrd recover- able, µg/L (01034)	Copper, water, unfltrd recover- able, µg/L (01042)	Iron, water, unfltrd recover- able, µg/L (01045)	Lead, water, unfltrd recover- able, µg/L (01051)	Mangan- ese, water, unfltrd recover- able, µg/L (01055)	Mercury water, unfltrd recover- able, µg/L (71900)	Nickel, water, unfltrd recover- able, µg/L (01067)	Selen- ium, water, unfltrd µg/L (01147)
Nov 13...	--	--	49	--	--	--	--	--	--	--	--	--	--
Feb 26...	58.6	<.04	26	24	.02	.42	1.2	97	.14	11.7	<.010	1.2	.13
May 07...	--	--	40	--	--	--	--	--	--	--	--	--	--
Aug 11...	62.5	<.04	50	63	E.01	<.40	E.96	22	.10	2.8	<.010	.30	.12

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007**  
**TO SEPTEMBER 2008**

Part 5 of 5

[Remark codes: <, less than;  
 E, estimated.]

Date	Silver, water, unfltrd recover- able, µg/L (01077)	Zinc, water, unfltrd recover- able, µg/L (01092)
Nov 13...	--	--
Feb 26...	<.02	2.0
May 07...	--	--
Aug 11...	<.02	<2.0

01462800 JACOBS CREEK AT SOMERSET, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 7

[Remark codes: <, less than; E, estimated.]

Date	1-Naphthol, water, fltrd, 0.7u GF, µg/L (49295)	2,6-Diethyl-aniline, water, fltrd, 0.7u GF, µg/L (82660)	2Chloro-2',6'-diethyl acet-anilide, wat flt, µg/L (61618)	CIAT, water, fltrd, µg/L (04040)	2-Ethyl-6-methyl-aniline, water, fltrd, µg/L (61620)	3,4-Di-chloro-aniline, water, fltrd, µg/L (61625)	3,5-Di-chloro-aniline, water, fltrd, µg/L (61627)	4-Chloro-2methyl phenol, water, fltrd, µg/L (61633)	Aceto-chlor, water, fltrd, µg/L (49260)	Ala-chlor, water, fltrd, µg/L (46342)	alpha-Endo-sulfan, water, fltrd, µg/L (34362)	Atra-zine, water, fltrd, µg/L (39632)	Azin-phos-methyl oxon, water, fltrd, µg/L (61635)
May 07...	<.04	<.006	<.010	E.015	<.010	<.006	<.008	<.005	<.006	<.006	<.006	.008	<.04

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 7

[Remark codes: <, less than; E, estimated.]

Date	Azin-phos-methyl, water, fltrd, 0.7u GF, µg/L (82686)	Ben-flur-alin, water, fltrd, 0.7u GF, µg/L (82673)	Car-baryl, water, fltrd, 0.7u GF, µg/L (82680)	Carbo-furan, water, fltrd, 0.7u GF, µg/L (82674)	Chlor-pyrifos oxon, water, fltrd, µg/L (61636)	Chlor-pyrifos, water, fltrd, µg/L (38933)	cis-Per-methrin, water, fltrd, 0.7u GF, µg/L (82687)	cis-Propi-cona-zole, water, fltrd, µg/L (79846)	Cyana-zine, water, fltrd, µg/L (04041)	Cyflu-thrin, water, fltrd, µg/L (61585)	lambda-Cyhalo-thrin, water, fltrd, µg/L (61595)	Cyper-methrin, water, fltrd, µg/L (61586)	DCPA, water, fltrd, 0.7u GF, µg/L (82682)
May 07...	<.120	<.010	<.060	<.020	<.06	<.005	<.010	<.006	<.020	<.016	<.004	<.014	<.003

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 7

[Remark codes: <, less than; E, estimated.]

Date	Desulf-inyl-fipro-nil, water, fltrd, µg/L (62170)	Diazi-non, water, fltrd, µg/L (39572)	Dicro-tophos, water, fltrd, µg/L (38454)	Diel-drin, water, fltrd, µg/L (39381)	Dimeth-oate, water, fltrd, 0.7u GF, µg/L (82662)	Disulf-oton sulfone, water, fltrd, µg/L (61640)	Disul-foton, water, fltrd, 0.7u GF, µg/L (82677)	Endo-sulfan sulfate, water, fltrd, µg/L (61590)	EPTC, water, fltrd, 0.7u GF, µg/L (82668)	Ethion monoxon, water, fltrd, µg/L (61644)	Ethion, water, fltrd, µg/L (82346)	Etho-prop, water, fltrd, 0.7u GF, µg/L (82672)	Fenami-phos sulfone, water, fltrd, µg/L (61645)
May 07...	E.003	<.005	<.08	<.009	<.006	<.01	<.04	<.022	<.002	<.02	<.006	<.012	<.053

## 01462800 JACOBS CREEK AT SOMERSET, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 7

[Remark codes: &lt;, less than; E, estimated.]

Date	Fenami-phos sulf- oxide, water, fltrd, µg/L (61646)	Fenami-phos, water, fltrd, µg/L (61591)	Desulf- inyl- fipro- nil amide, wat flt µg/L (62169)	Fipro- nil sulfide water, fltrd, µg/L (62167)	Fipro- nil sulfone water, fltrd, µg/L (62168)	Fipro- nil, Fonofos water, fltrd, µg/L (62166)	Hexa- zinone, water, fltrd, µg/L (04025)	Ipro- dione, water, fltrd, µg/L (61593)	Isofen- phos, water, fltrd, µg/L (61594)	Mala- oxon, water, fltrd, µg/L (61652)	Mala- thion, water, fltrd, µg/L (39532)	Meta- laxyl, water, fltrd, µg/L (61596)	
May 07...	<.20	<.03	<.029	<.013	E.004	E.004	<.010	<.008	<.01	<.006	<.020	<.016	<.007

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 5 of 7

[Remark codes: &lt;, less than; E, estimated.]

Date	Methid- athion, water, fltrd, µg/L (61598)	Methyl para- oxon, water, fltrd, µg/L (61664)	Methyl para- thion, water, fltrd 0.7u GF µg/L (82667)	Metola- chlor, water, fltrd, µg/L (39415)	Metri- buzin, water, fltrd, µg/L (82630)	Moli- nate, water, fltrd 0.7u GF µg/L (82671)	Myclo- butanil water, fltrd, µg/L (61599)	Oxy- fluor- fen, water, fltrd, µg/L (61600)	Pendi- meth- alin, water, fltrd 0.7u GF µg/L (82683)	Phorate oxon, water, fltrd, µg/L (61666)	Phorate water, fltrd 0.7u GF µg/L (82664)	Phosmet oxon, water, fltrd, µg/L (61668)	Phosmet water, fltrd, µg/L (61601)
May 07...	<.004	<.01	<.008	E.006	<.012	<.003	<.010	<.006	<.012	<.03	<.040	<.05	<.008

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 6 of 7

[Remark codes: &lt;, less than; E, estimated.]

Date	Prome- ton, water, fltrd, µg/L (04037)	Prome- tryn, water, fltrd, µg/L (04036)	Propy- zamide, water, fltrd 0.7u GF µg/L (82676)	Pro- panil, water, fltrd 0.7u GF µg/L (82679)	Propar- gite, water, fltrd 0.7u GF µg/L (82685)	Sima- zine, water, fltrd, µg/L (04035)	Tebu- thiuron water, fltrd 0.7u GF µg/L (82670)	Teflu- thrin, water, fltrd, µg/L (61606)	Ter- bufos sulfone water, fltrd, µg/L (61674)	Terbu- fos, water, fltrd 0.7u GF µg/L (82675)	Ter- buthyl- azine, water, fltrd, µg/L (04022)	Thio- bencarb water, fltrd 0.7u GF µg/L (82681)	trans- Propi- cona- zole, water, fltrd, µg/L (79847)
May 07...	E.01	<.006	<.004	<.006	<.04	E.005	<.02	<.003	<.04	<.02	<.01	<.010	<.02

01462800 JACOBS CREEK AT SOMERSET, NJ—Continued

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2007 TO  
SEPTEMBER 2008**

Part 7 of 7

[Remark codes: <, less than; E, estimated.]

Date	Tribu- phos, water, fltrd, µg/L (61610)	Tri- flur- alin, water, fltrd 0.7µ GF µg/L (82661)	Di- chlor- vos, water, fltrd, µg/L (38775)
<b>May 07...</b>	<.035	<.009	<.01